

IN THE CLAIMS

We claim:

1.(Amended) An electronic control device, comprising:

a parallel databus;

5 a plurality of assemblies connected to said parallel databus, said plurality of

assemblies each including:

a processor,

a memory device;

a DMA controller;

10 a bus controller connecting said plurality of assemblies to said parallel databus

such that data are transmitted between a transmitter assembly of said

plurality of assemblies and a receiver assembly of said plurality of

assemblies with messages, the bus controller of the transmitter assembly

being fashioned such that the transmitter assembly programs the DMA

15 controller to read out data stored in the memory device of the transmitter

assembly and to send them to the receiver assembly in response to a

request message of the receiver assembly without making use of the

processor of the transmitter assembly.

2.(Amended) An electronic control device according to claim 1, wherein

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the DMA controller is integrated into the bus controller of the transmitter assembly.

3.(Amended) An electronic control device according to claim 1, wherein the databus is a data bus compatible with MULTIBUS II.

5 4. (Amended) An electronic control device according to claim 1, wherein the receiver assembly includes a fail-safe counter for monitoring message transfer that is restarted upon reception of a data message.

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10 5.(Amended) A method for operating an electronic device, the electronic control device including a parallel databus and a plurality of assemblies connected to the databus that are respectively provided with a processor and a memory device and are connected to the databus with a bus controller, comprising the steps of:

transmitting data between a transmitter assembly and a receiver assembly with messages;

15 initiating a data transfer by sending a request message from the receiver assembly to the transmitter module; and

transmitting data stored in the memory device of the transmitter assembly to the

receiver assembly in response to the request message without making use of the processor of the transmitter assembly from the bus controller of the transmitter assembly.

6. (Amended) A method according to claim 5, further comprising the step

5 of:

utilizing a control device having

a parallel databus;

a plurality of assemblies connected to said parallel databus, said plurality

of assemblies each including:

10

a processor,

a memory device;

a DMA controller;

a bus controller connecting said plurality of assemblies to said parallel

databus such that data are transmitted between a transmitter

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assembly of said plurality of assemblies and a receiver assembly of

said plurality of assemblies with messages, the bus controller of the

transmitter assembly being fashioned such that the transmitter

assembly programs the DMA controller to read out data stored in

the memory device of the transmitter assembly and to send them to

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the receiver assembly in response to a request message of the receiver assembly without making use of the processor of the transmitter assembly.

7. (Amended) A method according to claim 5, further comprising the step

5 of:

sending a plurality of data messages respectively containing a data packet to the receiver assembly from the bus controller of the transmitter assembly following reception of a request message.

8. (Amended) A method according to claim 5, further comprising the step

10 of:

transmitting information for programming a DMA controller arranged at the transmitter assembly for reading and sending the data stored in the memory device of the transmitter assembly with the request message .

9. (Amended) A method according to claim 5, further comprising the step

15 of:

programming a DMA controller arranged on the transmitter assembly by the bus controller on a basis of data communicated with the request message,

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being programmed to read and transmit the data stored in the memory device of the transmitter assembly.

10. (Amended) A method according to claim 5, further comprising the steps of:

5 programming a DMA controller arranged on the receiver assembly for reception of the data with the transmission of the request message.

11. (Amended) A method according to claim 5, further comprising the step of:

transmitting the data with a plurality of messages that respectively contain a data
10 packet.

12. (Amended) A method according to claim 5, further comprising the step of:

providing an entry in a buffer of the transmitter is provided for each assembly present in the control device, so that the parameters characterizing the data
15 transfer are written into the respectively entry and stored during a data transfer and are erased after the conclusion of the data transfer.

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13. (Amended) A method according to claim 12,
upon reception of a request message, checking by the bus controller of the
transmitter assembly whether the entry of the buffer allocated to the
assembly sending the request message is already written with data
5 characterizing a data transfer in order to prevent two data transfers from
being simultaneously initiated with the same receiver assembly.

14. (Amended) A control device for editing print data for a high-
performance printer, comprising;
a parallel databus;
10 a plurality of assemblies connected to said parallel databus, said plurality of
assemblies each including:
a processor,
a memory device;
a DMA controller;
15 a bus controller connecting said plurality of assemblies to said parallel databus
such that data are transmitted between a transmitter assembly of said
plurality of assemblies and a receiver assembly of said plurality of
assemblies with messages, the bus controller of the transmitter assembly
being fashioned such that the transmitter assembly programs the DMA

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